Please amend claims 1, 4, 6 and 8 as follows:

1.   (Currently Amended) A method of calculating the frequency of appearance of a keyword, using a first database in which information about a base sequence or an amino acid sequence is stored and a second database in which document data is stored, said method consining of comprising:

a first document extraction step for extracting a first document from said first database which contains a base sequence or an amino acid sequence of a gene or protein of interest inputted by a user;

an identifier extraction step for extracting an identifier identifying document data in said first document from said extracted first document which contains the base sequence or the amino acid sequence;

a second document extraction step for extracting a second document from said second database which contains said extracted identifier;

an appearance frequency calculation step for sequentially reading keywords from a keyword table containing predefined keywords of known functions or characteristics of genes or proteins from said first database, and for calculating a frequency of appearance of each of said keywords by automatically and mechanically counting per document a number of extracted second documents containing said keywords therein said extracted second documents; and

a displaying step for displaying a frequency of appearance of each of said keywords in a corresponding position in said keyword table thereby showing numbers of documents including said keywords to determine whether to select or change a research course,

wherein said keyword table has a tree structure in which keywords are stored such that they are classified according to categories, and

wherein said appearance frequency calculation step comprises a step for generating a frequency calculation result table of a tree structure, said table containing the frequency of appearance of a keyword and the frequency of appearance of an upper-level category to which the keyword belongs.

2.   (Cancelled)

3.   (Previously Presented) The keyword frequency calculating method according to claim 1, wherein said first text data extraction step comprises a step for extracting a first document from said first database for each of a plurality of sequences entered by the user.

4.   (Currently Amended) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method of calculating the frequency of appearance of a keyword, using a first database in which information about a base sequence or an amino acid sequence is stored and a second database in which document data is stored, said program consisting of comprising:

a first document extraction module for extracting a first document from said first database which contains a base sequence or an amino acid sequence of a gene or protein of interest inputted by a user;

an identifier extraction module for extracting an identifier identifying document data in said first document from said extracted first document which contains the base sequence or the amino acid sequence;

a second document extraction module for extracting a second document from said second database which contains said extracted identifier;

an appearance frequency calculation module for sequentially reading keywords from a keyword table containing predefined keywords of known functions or characteristics of genes or proteins from said first database, and for calculating a frequency of appearance of each of said keywords automatically and mechanically counting per document a number of extracted second documents containing said keywords therein said extracted second documents;

a module for providing said keyword table with a tree structure in which keywords are stored such that they are classified according to categories; and

a displaying module for displaying a frequency of appearance of each of said keywords in a corresponding position in said keyword table thereby showing numbers of documents including said keywords to determine whether to select or change a research course,

wherein said appearance frequency calculation module generates a frequency calculation result table of a tree structure, said table containing the frequency of appearance of a keyword and the frequency of appearance of an upper-level category to which the keyword belongs.

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5.   (Cancelled)

6.   (Currently Amended) [[A]] The program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 4, wherein said first document extraction module extracts a first document from said first database for each of a plurality of sequences entered by the user.

7.   (Previously Presented) The keyword frequency calculating method according to claim 2, wherein a frequency of each category in the keyword table is the sum of frequencies of lower-level categories belonging to the category.

8.   (Currently Amended) [[A]] The program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 5, wherein a frequency of each category in the keyword table is the sum of frequencies of lower-level categories belonging to the category.